AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-40. (cancelled)

41. (currently amended) A method for treating cancer, comprising administering to a mammal in need thereof[[,]] an effective cancer-treating amount of:

i) at least one vector comprising a polynucleotide encoding a polypeptide selected from the group consisting of CYP1A2, CYP2E1, and CYP3A4, having ~~a P450~~ an activity of converting acetaminophen to a cytotoxic molecule, wherein the expression of the polynucleotide is controlled by a promoter~~, or an effective part thereof~~, and

ii) acetaminophen.

42. (previously presented) A method according to claim 41, wherein said mammal is human.

43. (previously presented) A method according to claim 41, wherein said vector is a eukaryotic expression vector.

44. (previously amended) A method according to claim 41, wherein said vector is a viral vector.

45. (currently amended) A method according to claim 44, wherein said viral ~~based~~ vector is a hybrid viral vector.

46. (currently amended) A method according to claim 44, wherein said viral ~~based~~ vector is ~~derived~~ obtained from a virus selected from the group consisting of adenovirus; retrovirus; adeno associated virus; herpes virus; lenti virus, and baculovirus.

47. (previously amended) A method according to claim 41, wherein said promoter is selected from the group consisting of TRP-1; HER2; HER3; ERBB2; ERBB3; CEA; MUC1; α-fetoprotein; Rous sarcoma virus long terminal repeat; cytomegalovirus promoter; murine leukemia long terminal repeat; simian virus 40 early and late promoters; herpes simplex virus thymidine kinase promoter; prostate specific antigen promoter (PSA); villin gene promoter; pancreatic amylase promoter; tyrosinase related peptide promoter, and tumor rejection antigen precursor promoters.

48. (previously amended) A method according to claim 41, wherein said promoter is a hybrid promoter.

49. (previously presented) A method according to claim 41, wherein said promoter is a tumor-specific promoter.

50. (previously presented) A method according to claim 49, wherein said tumor-specific promoter is selected from the group consisting of TRP-1; HER2; HER3; ERBB2; ERBB3; CEA; MUC1; α-fetoprotein; pancreatic amylase promoter; tyrosinase related peptide promoter, and tumor rejection antigen precursor promoters.

51. (previously presented) A method according to claim 41, wherein said promoter is a constitutive promoter.

52. (previously presented) A method according to claim 51, wherein said constitutive promoter is selected from the group consisting of villin gene promoter; Rous sarcoma virus long terminal repeat; cytomegalovirus promoter; murine leukemia long terminal repeat; simian virus 40 early and late promoters; and herpes simplex virus thymidine kinase promoter.

53. (currently amended) A method according to claim 41, wherein said ~~gene~~ polynucleotide ~~encoding a polypeptide having P450 activity~~ is of mammalian origin.

54. (currently amended) A method according to claim 53, wherein said ~~gene~~ polynucleotide ~~encoding a polypeptide having P450 activity~~ is of human origin.

55. (cancelled)

56. (currently amended) A method according to Claim 41 ~~55~~, wherein the ~~gene encoding a~~ polypeptide ~~having P450 activity~~ is CYP1A2.

57. (currently amended) A method according to claim 53, wherein said ~~gene~~ polynucleotide ~~encoding a polypeptide having P450 activity~~ is of rodent origin.

58. (cancelled)

59. (previously presented) A method according to claim 41, wherein said cancer is selected from the group consisting of breast; pancreatic; ovarian; cervical; lung; hepatic; renal; testicular; prostate; gastrointestinal; glioma; melanoma; bladder; lymphoma; leukemia; epithelial, mesothelial, and retinal cancers.

60. (currently amended) A method of treating cancer comprising administering to a mammal in need thereof, concurrently or in sequence, an effective amount of:

i) at least one vector, capable of transfecting at least one tumor cell, wherein said vector comprises a polynucleotide encoding a polypeptide selected from the group consisting of CYP1A2; CYP2E1, and CYP3A4 having an activity of converting acetaminophen to a cytotoxic molecule, and wherein, ~~includes at least one P450 gene, or the effective part thereof~~, the expression of ~~which~~ the polynucleotide is controlled by a tumor-specific promoter ~~sequence, or the effective part thereof, which shows substantially tumor cell specific expression~~;

ii) at least one agent selected from the group consisting of methionine and acetylcysteine ~~capable of modulating the amount of glutathione in said mammal~~; and

iii) acetaminophen.

61. (previously amended) The method of claim 60, wherein the vector, agent and acetaminophen are administered sequentially.

62. (cancelled).

63. (currently amended) A composition of matter comprising acetaminophen~~, or a structurally related derivative thereof~~; and a vector comprising a polynucleotide encoding a polypeptide selected from the group consisting of CYP1A2, CYP2E1, and CYP3A4 having ~~a P450~~ an activity of converting acetaminophen to a cytotoxic molecule, wherein the expression of the

~~polypeptide~~ polynucleotide is controlled by a promoter ~~sequence, or an effective part thereof~~.

64. (cancelled)

65. (previously presented) A composition according to Claim 63, wherein the vector is a eukaryotic expression vector.

66. (previously amended) A composition according to Claim 63, wherein the vector is a viral vector.

67. (previously presented) A composition according to Claim 64, wherein the vector is a hybrid viral vector.

68. (currently amended) A composition according to Claim 66, wherein the viral vector is ~~based on~~ obtained from a virus selected from the group consisting of adenovirus; retrovirus; adeno-associated virus; herpesvirus; lentivirus; and baculovirus.

69. (previously amended) A composition according to Claim 63, wherein said promoter is selected from the group consisting of TRP-1; HER2; HER3; ERBB2; ERBB3; CEA; MUC1; α-fetoprotein; Rous sarcoma virus long terminal repeat; cytomegalovirus promoter; murine leukemia long terminal repeat; simian virus 40 early and late promoters; herpes simplex virus thymidine kinase promoter; prostate specific antigen promoter (PSA); villin gene promoter; pancreatic amylase promoter; tyrosinase related peptide promoter, and tumor rejection antigen precursor promoters.

70. (previously amended) A composition according to Claim 63, wherein said promoter is a hybrid promoter.

71. (previously presented) A composition according to Claim 63, wherein said promoter is a tumor-specific promoter.

72. (previously amended) A composition according to Claim 71, wherein said tumor-specific promoter is selected from the group consisting of TRP-1; HER2; HER3; ERBB2; ERBB3; CEA; MUC1; α-fetoprotein; pancreatic amylase promoter; tyrosinase related peptide promoter, and tumor rejection antigen precursor promoters.

73. (previously presented) A composition according to Claim 63, wherein said promoter is a constitutive promoter.

74. (previously presented) A composition according to Claim 73, wherein said constitutive promoter is selected from the group consisting of villin gene promoter; Rous sarcoma virus long terminal repeat; cytomegalovirus promoter; murine leukemia long terminal repeat; simian virus 40 early and late promoters; and herpes simplex virus thymidine kinase promoter.

75. (previously amended) A composition according to Claim 63, wherein the polynucleotide ~~encoding a polypeptide having P450 activity~~ is of mammalian origin.

76. (previously amended) A composition according to Claim 75, wherein the polynucleotide is of human origin.

77. (cancelled)

78. (currently amended) A composition according to Claim 76 ~~77~~, wherein the polynucleotide ~~is~~ encodes CYP1A2.

79. (previously amended) A composition according to Claim 63, wherein the polynucleotide is of rodent origin.

80. (cancelled)

81. (currently amended) A composition according to Claim 63, further comprising at least one agent capable of modulating glutathione level in a mammal, wherein the agent is methionine or acetylcysteine.

82. (cancelled).

83. (cancelled).

84. (currently amended) A composition according to claim 81 ~~82~~, further comprising a pharmaceutically acceptable excipient, carrier or diluent.

85. (currently amended) A method for selectively killing cells in a mammal, the method comprising administering to the mammal, concurrently or in sequence, an effective amount of

i) at least one vector comprising a polynucleotide encoding a polypeptide selected from the group consisting of CYP1A2; CYP2E1, and CYP3A4 having an ~~a P450~~ activity of converting acetaminophen to a cytotoxic molecule, wherein the expression of the polynucleotide is controlled by a promoter~~, or an effective part thereof~~, and

ii) acetaminophen,

wherein the acetaminophen is converted in the cells into NABQI and wherein said cells do not express a sufficient level of glutathione to detoxify the NABQI.

86. (new) A method according to Claim 57, wherein the mammal is a human, and wherein the method further comprises administering to the mammal an effective amount of furaphylline that inhibits the activity of human CYP1A2, CYP2E1, or CYP3A4 in cells of the human.

87. (new) A method according to Claim 86, wherein the polypeptide is selected from the group consisting of rodent CYP1A2, rodent CYP2E1, and rodent CYP3A4.